UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,848	08/31/2001	Anders Fahnoe Heie	NC25858	2176

30973 7590 01/12/2004

SCHEEF & STONE, L.L.P.
5956 SHERRY LANE
SUITE 1400
DALLAS, TX 75225

EXAMINER	
BELL, PAUL A	

ART UNIT	PAPER NUMBER
2675	9

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,848	HEIE, ANDERS FAHNOE	
	Examiner	Art Unit	
	PAUL A BELL	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,15,16 and 18-21* is/are rejected.

7)☒ Claim(s) *17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 2 line 3, the phrase "is communications network" is not clear, is this the "a communications network external to the electrically-powered device" or could it be "a second communications network" inside the electrically-powered device.

With regard to claims 3 and 4 they have the same problem as claim 2. Please make necessary corrections.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Reinhardt (5,598,565).

With regard to claim 1, Reinhardt teaches in an electrically-powered device having a liquid-crystal display (LCD) (figure 1, item 180, and column 1, lines 32-42, 55-58) comprising;

a driver and a plurality of pixels (figure 2, items 170, 180 and 195), wherein the optical characteristics of the liquid crystal associated with each pixel are defined by the selective local application of an electrical charge (column 4, lines 22-29), a method of conserving electrical power comprising the steps of: receiving, in a driver of the LCD, data containing an image for display on the LCD (inherent that data goes to the driver before display); determining that power-conservation mode is appropriate according to predetermined criteria *received from a communications network external to the electrically-powered device* (figure 1 shows, item 110 CPU, item 120 "memory", item 160 "Power Management Hard Disk Drive" item 165 "Power Management Floppy Disk Drive" It is inherent that these listed items came in contact with "a communications network external" to be at least initially programmed so the device would work); analyzing the image data in a microprocessor of the LCD driver to determine the pixel-charging sequence required to produce the image associated with the image data; entering power-conservation mode by modifying the pixel-activation sequence to reduce the number of pixels to which voltage is to be supplied; and displaying on the LCD an image created by the modified pixel-activation sequence (column 2, lines 1-22 and figure 2, items 195, 170 and 180, figure 3b, items 310 and 320).

With regard to claim 2, Reinhardt teaches the method of claim 1, wherein the predetermined criteria *received from the communications network* for entering power-conservation mode is *communications network* receipt of a user-entered instruction to enter power-conservation mode (column 2, lines 16-21).

With regard to claim 3, Reinhardt teaches the method of claim 1, wherein the predetermined criteria *received from the communications network* for entering power conservation mode is *communications network receipt of* a low-power indication generated within the device (column 3, lines 41-52).

With regard to claim 4, Reinhardt teaches the method of claim 1, wherein the predetermined criteria for entering a power conservation mode is *communications network receipt of* a reduce-power signal (column 4, lines 42-45 the "operating system" in CPU connected to a bus reads on the broad language "communication network").

With regard to claim 5, Reinhardt teaches the method of claim 1, further comprising the steps of: determining that leaving power-consumption mode is appropriate according to predetermined criteria; and leaving power consumption mode by returning to full power for all pixels (column 5, lines 3-11).

With regard to claim 6, Reinhardt teaches the method of claim 1, further comprising the step of selectively alternating the subset of no-power pixels (column 2, lines 1-4).

With regard to claim 7, Reinhardt teaches the method of claim 1, wherein the predetermined criteria for entering power-conservation mode includes an indication of the level of ambient light (column 4, lines 54-60 inherent that the "visibility" in this section is related to ambient light).

With regard to claim 8, Reinhardt teaches the method of claim 1, wherein the predetermined criteria for entering power conservation mode includes an automatically-generated timing signal (column 4, lines 29-42).

With regard to claim 9, Reinhardt teaches the method of claim 1, wherein the subset of no-power pixels is selected according to the image being displayed (column 2, lines 1-6 figure 3b).

With regard to claim 10, Reinhardt teaches an LCD system (figure 1, item 180, and column 1, lines 32-42, 55-58), comprising: an LCD display having a plurality of pixels that are variably activated to create a video image (column 4, lines 22-29); and an LCD driver for receiving power from a power supply and selectively providing power to activate the display pixels (figure 1, items 170 and 180); power-conservation circuitry coupled to the LCD driver for selectively applying pre-determined power-conservation criteria by reducing from full power the power level supplied to a selected subset of pixels (column 2, lines 1-22 and figure 2, items 195, 170 and 180, figure 3b, items 310 and 320) *wherein the power-conservation circuitry is capable of interaction with a communications network external to the LCD system* (figure 1 shows, item 110 CPU, item 120 "memory", item 160 "Power Management Hard Disk Drive" item 165 "Power Management Floppy Disk Drive" It is inherent that these listed items are capable of contact with "a communications network external to the LCD system");.

With regard to claim 11, Reinhardt teaches the LCD system of claim 10, wherein the power-reduction applied to a selected subset of pixels causes no power to be sent to the selected pixel subset (column 2, lines 1-6).

With regard to claim 12, Reinhardt teaches the system of claim 11, wherein the subset of no-power pixels is selected based on the image being displayed (column 5, lines 3-10).

5. Claims 13, 15, 16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Rader (5,867,140).

With regard to claim 13, Rader teaches an improved portable electronic device for communicating with a communications network *external to the portable electronic device* (figure 1 shows a cell phone which is used for communicating with a communications network *external to the portable electronic device*) comprising: a receiver for receiving information from the communications network (figure 3, items 318 and 106); a liquid-crystal display (LCD) comprising a plurality of pixels for displaying images according to the information received from the communications network (figure 3, items 200 and 303); an LCD driver for receiving the received information and translating at least a portion of the information into instructions for selectively activating the pixels in order to produce an image (figure 3, item 311, 313 and 305), wherein the LCD driver determines if a power-conservation mode has been *automatically* selected and, if so, modifies the instructions accordingly (abstract, column 3, lines 30-52 the sleep mode will happen automatically if user does nothing).

With regard to claim 15 Rader teaches the device of claim 13, wherein the automatic selection of power-conservation mode is responsive to a low-battery indication (column 4, lines 6-14).

With regard to claim 16 Rader teaches the device of claim 14, wherein the automatic selection of power-conservation mode is responsive to a signal received from the communications network (column 3, lines 40-44 It is inherent that when the RF circuit detects incoming call, a change from no activity, from the communications network that it takes it out of the sleep mode or it would not work properly).

With regard to claim 18 Rader teaches the device of claim 13, wherein the instruction modification performed if power-conservation mode has been selected includes omitting a predetermined number of pixel-activations (figure 3 items 305 and 303).

With regard to claim 19 Rader teaches the device of claim 18, wherein the number of omitted pixel-activations is determined as a first selected percentage of the total number of pixels to be charged during a first defined portion of the pixel-activation sequence (It is inherent that in figure 3 item 305 is a percentage of the total image item 303).

With regard to claim 20 Rader teaches the device of claim 19, wherein approximately fifty percent of the pixel-activations are omitted (figure 3, items 305 and 303 its approximately 50 %).

With regard to claim 21 Rader the device of claim 19, wherein a second selected percentage of the total number of pixels to be activated determines the omitted pixel-activations

in a second defined portion of the pixel-activation sequence (When the cover is open all the pixels are activated).

Allowable Subject Matter

6. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record listed in this case does not teach or fairly suggest the limitation, " wherein the signal received from the communications network is generated by the network upon detecting a device transmission strength lower than a pre-determined threshold" , in combination with all the other limitations of claim 17 which depends on claims 16 and 13.

Response to Arguments

8. Applicant's arguments filed 24 October 2003 have been fully considered but they are not persuasive.

The applicant argues on page 7 with regard to claim 1, Reinhardt does not teach the external network interface power control of the presently claimed invention, where the communications network is external to the LCD device. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e.,"external network interface power control" and "communications network is external to the LCD device") are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With further regard to claim 1 examiner references the actual claim language used and examiners rejection above in response to the exact language of claim.

The applicant argues on page 8 with regard to claim 13, Rader does not teach presently claimed "network signal to enter power conservation mode", and no teaching, suggestion or inference is made, "to send a signal for power conservation mode over such a network". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "network signal to enter power conservation mode" and "to send a signal for power conservation mode over such a network") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With further regard to claim 13 examiner references the actual claim language used and examiners rejection above in response to the exact language of claim.

For future reference for applicant it would be best if applicant identified the exact phrase in each independent claim that makes the claim novel in combination with all the other limitations of the claim instead of presenting one of many narrow interpretations of the claim language. The applicant must convince examiner that all possible reasonable broad interpretations of the exact phrase used in claim do not clearly read on prior art of record.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Bell whose telephone number is (703) 306-3019. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Paul Bell
Art unit 2675
8 January 2004

CHANH NGUYEN
PRIMARY EXAMINER